Form 3160-5 (August 1999)

UNIT: TATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals

NW.DW.DW.Dest:2210. 1301 W. Gommansanue

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FORM APPROVED OMB NO. 1004-0135

CONScripters: November 30, 2000

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abandoned well. Use For	rm 3160-3 (APD) for such proposals.	Gra, martin coused has
		N/A
	Other instructions on reverse side	7. If Unit or CA/Agreement, Name and/or N Indian Hills Unit
1. Type of Well Oil Well Cas Well Other		8. Well Name and No.
2. Name of Operator /		Indian Hills Unit # 34
Marathon Oil Company		
3a. Address	3b. Phone No. (include area code)	9. API Well No.
P.O. Box 552 Midland, TX 79702	915/687-8357	30-015-31751
4. Location of Well (Footage, Sec., T., R., M., or Survey	Description)	10. Field and Pool, or Exploratory Area
Section 28, T-21-S, R-24-E	1	Upper Penn/ Morrow
1416' FNL & 1607' FWL		11. County or Parish, State
Eddy Co. N.M. 320 acres N/2 U.	.L. "F"	Eddy N.M.
	BOX(ES) TO INDICATE NATURE OF NOTICE	
	T	, REPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF AC	
X Notice of Intent	Acidize Deepen Pro	oduction (Start/Resume) Water Shut-Off
Subsequent Report		eclamation Well Integrity
· · · · · · · · · · · · · · · · · · ·	Casing Repair New Construction Re	ecomplete Other
Final Abandonment Notice	Change Plans Plug and Abandon Te	mporarily Abandon
	Convert to Injection Plug Back	ater Disposal
Attach the Bond under which the work will be pe following completion of the involved operations. testing has been completed. Final Abandonment determined that the final site is ready for final inspe Marathon Oil Company is proposing Tail. This endeavor will require	All state all pertinent details, including estimated starting date of plete horizontally, give subsurface locations and measured and the performed or provide the Bond No. on file with BLM/BIA. Rec If the operation results in a multiple completion or recompletion Notices shall be filed only after all requirements, including rec vection.) g to change the proposed depth to include e a casing program change. A previous Su rface cement program for this well.	true vertical depths of all pertinent markers and zones, quired subsequent reports shall be filed within 30 days in in a new interval, a Form 3160-4 shall be filed once clamation, have been completed, and the operator has a Morrow
Please see attached information t	for details of proposed changes.	()3(
Please find the attached C-102 fo	or the Morrow pool.	RECLARIES
Administrative Order NSL-4638-A-S Non Standard Location.	SD gives approval for the Indian Basin Up	• •
<u> </u>		
 I hereby certify that the foregoing is true and correct Name (Printed/Typed) 	Title	
Name (Printea/1ypea)		

Jerry Fletcher	Engineer Tech.
Jung Filthen	Date 1/18/02
THIS SPACE FOR FEDER	RAL OR STATE OFFICE USE
Approved by (ORIG. SGD.) ALEXIS C. SWOBODA	Title PETROLEUM ENGINEER Date JAN 2 3 2002
Conditions of approval, if any, are attached. Approval of this notice does not warr, certify that the applicant holds legal or equitable title to those rights in the subject which would entitle the applicant to conduct operations thereon.	ant of log
Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for States any false, fictitious or fraudulent statements or representations as to any matter	r any person knowingly and willfully to make to any department or agency of the United r within its jurisdiction.

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DRILLING PROGRAM MARATHON OIL COMPANY INDIAN HILLS UNIT #34

1. Estimated KB Elevation: 3730' KB

FORMATION	TO MEASUREI	DP D <u>SUBSE</u> 4		IEASURED	SUBSEA	FLUID <u>CONTENT</u>
Queen San Andres Glorietta Delaware	Surface 650' 2250' 3300'	+3730' +3080' +1480' +430'	22 23 43	850' 250' 355' 300'	+3080' +1480' +1375' - 570'	water water
Bone Spring Wolfcamp B/Permian Shale U. Penn	4300' 5950' 7520' 7550'	-570' -2220' -3790' -3820'	75 75	950' 520' 530' 665'	-2220' -3790' -3800' -4935'	oil gas oil gas gas, oil, water
Atoka Morrow T.D.	8665' 8947' 9600'	-4935' -5217' -5870 '	ę	3947' 9600' 9600'	-5217' -5870' -5870'	gas, oil, water oil ,gas
FORMATION		BH P PG E MW		внт н2S РР М	SIGNIFICANC (obj, marker, et	—
Bone Springs Wolfcamp B/Permian Shale U. Penn Morrow	1210 8.5 1680 9.0 1810 9.0 2050 9.0 3460 9.1	0 0 0		500 1000 0	marker marker objective pay objective pay objective pay	

2. See (1) above.

If any unexpected water or mineral bearing zones are encountered, they will be reported, evaluated, and protected as circumstances and regulations require.

3. <u>Pressure Control Equipment</u>:

<u>9-5/8" Surface:</u> 11" 3M annular tested to 300# PSI / 3000#PSI PSI, 11" 3M Dual rams, choke manifold and mud cross, tested to 300#/3000#.

Auxiliary Equipment:

Surface Hole: Annular or rotating head w/air rig.

Intermediate Hole: N/A

Production Hole: Flow indicator, PVT, H₂S Sensors, air packs, stroke counter, rotating head.

BOP systems will be consistent with API RP 53. Blowout preventers will be installed and tested prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers and casing will be pressure tested before drilling casing cement plugs.

Upper and lower kelly cocks with valve handle and safety valve and subs to fit all drillstring connections in use will be available on rig floor.

BREED OF WAR 2310E

A. P. D. (cont.) Thirteen Point Surface Use Plan Indian Hills Unit # 34

Test Frequency

- 1. When installed.
- 2. Anytime a pressure seal is broken (test confined only to affected equipment).

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- 3. At least every 20 days.
- 4. Blind and pipe rams shall be activated each trip but not more than once/day.

4. Casing and Cement Program:

DEP1 FROM	гн <u>то</u>	SECTION LENGTH	HOLE <u>SIZE</u>	CSG <u>SIZE</u>	WT. PPF	GRADE	THREADS COUPLINGS	NEW USED
0	1200'	1200'	12.25"	9-5/8"	36.00#	K-55	8rd, STC	New
0	4800'	4800'	8.750"	7.00"	23.00#	K-55	8rd, LT&C	New
4800'	9600'	4800 '	8.750"	7.00"	26.00#	K-55	8rd, LT&C	New

Casing <u>String</u>	DV <u>Depth</u>	<u>Stg.</u>	Lead <u>Tail</u>	Amt <u>SXS</u>	Type <u>Cement</u>	Yield <u>CF/SX</u>	Wt. <u>PPG.</u>	TOC	Additives
9.625"	none	1	L	300	Foam Cmt.	1.78	11.2	100'	
9.625"	none		т	140	"C Neat	1.35	14.8	900'	3% Cacl

NOTE: Pump 55 sks. Class "C" dn. Annulus W/ 3% CACL2, Yield: 1.35cf/sk, Density 14.8 ppg coverage, Surface To 100'.

This surface casing program has been approved by the OCD in Artesia by Mr. Tim Gum and Mr. Van Barton as of 11/29/01.

7.0"	6300'	1	L	340	Prem.	1.44	13.0	5600'	Foamers, N2
7.0"		2	L	840	Interfill "C"	2.47	11.9	Surface	1/4pps Cello,3pps Gilsonite,0.2% Halad 322
7.0″		2	т	100	"C" Neat	1.32	14.8	6000'	N/A

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A. P. D. (cont.) Thirteen Point Surface Use Plan Indian Hills Unit # 34

Each stage will be preceded by an appropriate mud flush. Actual production hole volumes will be based on the caliper volume plus 25% excess.

5. Mud Program

	PTH		WEIGH	т	WL		VISUAL
FROM	<u>1 TO</u>	MUD TYPE	<u>(PPG)</u>	<u>VIS</u>	<u>CC</u>	ADDITIVES	MONTR.
0	1200'	fresh water	8.3	28	N/A	Gel, Lime	Reserve
1200'	5000'	fresh	8.5	28-32	N/C	Gel, caustic, H ₂ S Scavenger	Reserve
5000'	7000'	fresh	8.9	32-36	N/C	Gel, caustic, H ₂ S Scavenger	Reserve
7000'	8800'	cut brine	9.0	32-36	<20	Gel, caustic, H ₂ S Scavenger	Steel Pits
8800'	9600'	cut brine	9.0	32-36	<20	Gel ,caustic	Steel Pits

Sufficient quantities of additives will be on location to maintain above mud properties for any anticipated well conditions.

6. Logging, Testing & Coring Programs:

LOG/TEST/CORE/MUDLOG/OTHER	INTE <u>From</u>	RVAL- TOREMARKS
DLL/MSFL/GR/CNL/LDT/CAL	TD	5000'
LDT/CNL/GR/CAL	TD	surf casing
MUD LOGGER	6000'	TD ROP, Lithology, Gas Analysis, Chromatograph

NO CORES OR DST'S

7. Abnormal Pressures, Temperatures or Potential Hazards:

None anticipated. Possible H_2S in Cisco & Upper Penn. See H_2S Drilling Operations Plan.

8. <u>Other Information</u>:

Anticipated Starting Date: As soon as possible.

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Duration of Well: drilling - 25 days, completion - 10 days.

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CHM ACT I Sec 1880, Robbs,	1ENT # NH 88341-194				State of No			· · ·	Revised Februar	m C-102 y 10, 1994		
TRICT II Drawar DD, Artan TRICT III) Rio Brance Re				OIL CONSERVATION DIVISION P.0. Box 2088 Santa Fe, New Mexico 87504-2088						to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies		
TRICT IV BOX 2008, BANTA	178, N.M. 875	042088	WELL LO	CATION	AND ACRE	AGE D	EDICATI	ON PLAT	AMENDED	REPORT		
AFI Number Pool Code Pool Name 78960 Indian Basin Morrow]		
Property (Code		/090		Property Na	me		101.1.0 W	Well Num	ber		
OGRID No	.	· · · · · · · · · · · · · · · · · · ·		11N	DIAN HILL							
.4021				MARAT	HON OIL		NY		Klevatio 3704			
		*		· · · · · · · · · · · · · · · · · · ·	Surface Lo	cation				l		
L or lot No.	Section	Township	Range	Lot Idn	Feet from the		South line	Feet from the	Bast/West line	County		
F	28	21-S	24-E		1416		RTH	1607	WEST	EDDY		
L or lot No.	Section	Township	Bottom	Hole Loc Lot Idn	Peet from the		rom Sur South line					
	Decuon	10.000			reet nom die	Northy	South Hite	Feet from the	Bast/West line	County		
edicated Acres	s Joint o	r Infill Co	nsolidation (Code Ori	der No.							
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O IHU #	3709 10	.5'	~o	Window In Buf	for Morr fer Zone	row	<u>c 660</u>	Printed Name Enginee Title 8/24/0 Date	er Tech.			
IHU #		Project	t Area	I	. © HU ∦ 20			J hereby certify on this plat we actual surveys supervison, an correct to th	IR CERTIFICAT that the well locations plotted from field made by me or d that the some is e best of my belief RUARY 5, 2001	ion shown I notes of under my true and f.		
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